

SEQUENCE LISTING

<110> Lind, Peter
Wood, Linda S.
Hiebsch, Ronald
Ruff, Valerie
Lindberg, Eleni
Parodi, Luis A.
Vogeli, Gabriel

<120> Novel G Protein Coupled Receptors

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<151> 2000-02-23

<150> 60/188,880
<151> 2000-03-13

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<151> 2000-07-20

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<151> 1999-12-28

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<150> 60/200,534
<151> 2000-04-27

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09/25/2023 - 12:28:00

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Lys Ala Val Arg Glu Lys Cys Met Ala Leu Met Ala Asn Asp Glu Glu
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 35 40 45

Asn Pro Phe Ala Ile Tyr Leu Leu Asp Val Ala Cys Ala Asp Leu Ile
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Phe Leu Gly Cys His Met Val Ala Ile Val Pro Asp Leu Leu Gln Gly
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Arg Leu Asp Phe Pro Gly Phe Val Gln Thr Ser Leu Ala Thr Leu Arg
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Phe Phe Cys Tyr Ile Val Gly Leu Ser Leu Leu Ala Ala Val Ser Val
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Glu Gln Cys Leu Ala Ala Leu Phe Pro Ala Trp Tyr Ser Cys Arg Arg
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Pro Arg His Leu Thr Thr Cys Val Cys Ala Leu Thr Trp Ala Leu Cys
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Glu Pro Ser Arg His Leu Cys Arg Thr Leu Trp Leu Val Ala Ala Val
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Phe Ser Val Tyr Val Leu Ser Leu Ala Gly Ala Asp Phe Leu Phe Leu
35 40 45

Cys Phe Gln Ile Ile Asn Cys Leu Val Tyr Leu Ser Asn Phe Phe Cys
50 55 60

Ser Ile Ser Ile Asn Phe Pro Ser Phe Phe Thr Thr Val Met Thr Cys
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Ala Tyr Leu Ala Gly Leu Ser Met Leu Ser Thr Val Ser Thr Glu Arg
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Cys Leu Ser Val Leu Trp Pro Ile Trp Tyr Arg Cys Arg Arg Pro Arg
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His Leu Ser Ala Val Val Cys Val Leu Leu Trp Ala Leu Ser Leu Leu
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35 40 45

His Asn Leu Val Ala Ser Thr Ala Val Ser Asp Glu Leu Val Ala Ala
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35 40 45

Leu Ile Ala Leu Ala Pro Leu Leu Phe Gly Arg Gly Glu Val Cys Asp
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Val Tyr Arg Lys Ile Tyr Glu Ala Ala Lys Phe Arg Phe Gly Arg Arg
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Ser Arg Met Gly Glu Trp Ala Glu Ala Cys Thr Asn Gly Ala Arg Ala
145 150 155 160

Gln Arg Ser Pro Gly Ala His Glu Asp Lys Phe Ala Ile Ser Ser Ser
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Gln Ser Ala Arg
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35 40 45

Arg Thr Phe Phe Ala Ala Lys Ile Val Ile Gly Met Ala Leu Gly
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Ile Met Leu Val Cys Gly Ile Gly Asn Phe Ile Phe Ile Ala Ala Leu
65 70 75 80

Val Arg Tyr Lys Lys Leu Arg Asn Leu Thr Asn Leu Leu Ile Ala Asn
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Met Asp Tyr Tyr Val Val Arg Gln Leu Ser Trp Glu His Gly His Val
115 120 125

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145 150 155 160

Gly Gln Gln Arg Arg Ser Gly Arg Lys Gly His Trp Asn Cys Pro Leu
165 170 175

Leu Tyr Cys Ser Cys Arg Leu Met Arg Gly Val Ser Ile Pro Pro Arg
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 Asp Arg Arg Ala Phe Thr Val Pro Thr Ile Val Val Glu Asp Ala Gln
 165 170 175

 Gly Lys Arg Arg Ser Ser Ile Asp Gly Ser Glu Pro Ala Lys Thr Ser
 180 185 190

 Leu Gln Thr Thr Gly Leu Val Thr Thr Ile Val Phe Ile Tyr Asp Cys
 195 200 205

 Leu Met Gly Phe Pro Val Leu Val
 210 215

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= 122308
<210> 23
<211> 119
<212> PRT
<213> Homo sapiens

<400> 23

Met Ser Asp Glu Arg Arg Leu Pro Gly Ser Ala Val Gly Trp Leu Val
1 5 10 15

Cys Gly Gly Leu Ser Leu Leu Ala Asn Ala Trp Gly Ile Leu Ser Val
20 25 30

Gly Ala Lys Gln Lys Lys Trp Lys Pro Leu Glu Phe Leu Leu Cys Thr
35 40 45

Leu Ala Ala Thr His Met Leu Asn Val Ala Val Pro Ile Ala Thr Tyr
50 55 60

Ser Val Val Gln Leu Arg Arg Gln Arg Pro Asp Phe Glu Trp Asn Glu
65 70 75 80

Gly Leu Cys Lys Val Phe Val Ser Thr Phe Tyr Thr Leu Thr Leu Ala
85 90 95

Thr Cys Phe Ser Val Thr Ser Leu Ser Tyr His Arg Met Trp Met Val
100 105 110

Cys Trp Pro Val Asn Tyr Arg
115

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<213> Homo sapiens

<400> 24

Met Asp Pro Thr Thr Pro Ala Trp Gly Thr Glu Ser Thr Thr Val Asn
1 5 10 15

Gly Asn Asp Gln Ala Leu Leu Leu Cys Gly Lys Glu Thr Leu Ile
20 25 30

Pro Val Phe Leu Ile Leu Phe Ile Ala Leu Val Gly Leu Val Gly Asn
35 40 45

Gly Phe Val Leu Trp Leu Leu Gly Phe Arg Met Arg Arg Asn Ala Phe
50 55 60

Ser Val Tyr Val Leu Ser Leu Ala Gly Ala Asp Phe Leu Phe Leu Cys
65 70 75 80

Phe Gln Ile Ile Asn Cys Leu Val Tyr Leu Ser Asn Phe Phe Cys Ser
85 90 95

Ile Ser Ile Asn Phe Pro Ser Phe Phe Thr Thr Val Met Thr Cys Ala
100 105 110

Tyr Leu Ala Gly Leu Ser Met Leu Ser Thr Val Ser Thr Glu Arg Cys

115

120

125

Leu Ser Val Leu Trp Pro Ile Trp Tyr Arg Cys Arg Arg Pro Arg His
 130 135 140

Leu Ser Ala Val Val Cys Val Leu Leu Trp Ala Leu Ser Leu Leu Leu
 145 150 155 160

Ser Ile Leu Glu Gly Lys Phe Cys Gly Phe Leu Phe Ser Asp Gly Asp
 165 170 175

Ser Gly Trp Cys Gln Thr Phe Asp Phe Ile Thr Ala Ala Trp Leu Ile
 180 185 190

Phe Leu Phe Met Val Leu Cys Gly Ser Ser Leu Ala Leu Leu Val Arg
 195 200 205

Ile Leu Cys Gly Ser Arg Gly Leu Pro Leu Thr Arg Leu Tyr Leu Thr
 210 215 220

Ile Leu Leu Thr Val Leu Val Phe Leu Leu Cys Gly Leu Pro Phe Gly
 225 230 235 240

Ile Gln Trp Phe Leu Ile Leu Trp Ile Trp Lys Asp Ser Asp Val Leu
 245 250 255

Phe Cys His Ile His Pro Val Ser Val Val Leu Ser Ser Leu Asn Ser
 260 265 270

Ser Ala Asn Pro Ile Ile Tyr Phe Phe Val Gly Ser Phe Arg Lys Gln
 275 280 285

Trp Arg Leu Gln Gln Pro Ile Leu Lys Leu Ala Leu Gln Arg Ala Leu
 290 295 300

Gln Asp Ile Ala Glu Val Asp His Ser Glu Gly Cys Phe Arg Gln Gly
 305 310 315 320

Thr Pro Glu Met Ser Arg Ser Ser Leu Val
 325 330

<210> 25

<211> 371

<212> PRT

<213> Homo sapiens

<400> 25

Met Pro Ala Asn Phe Thr Glu Gly Ser Phe Asp Ser Ser Gly Thr Gly
 1 5 10 15

Gln Thr Leu Asp Ser Ser Pro Val Ala Cys Thr Glu Thr Val Thr Phe
 20 25 30

Thr Glu Val Val Glu Gly Lys Glu Trp Gly Ser Phe Tyr Tyr Ser Phe
 35 40 45

Lys Thr Glu Gln Leu Ile Thr Leu Trp Val Leu Phe Val Phe Thr Ile
 50 55 60

Val Gly Asn Ser Val Val Leu Phe Ser Thr Trp Arg Arg Lys Lys

65

75

80

Ser Arg Met Thr Phe Phe Val Thr Gln Leu Ala Ile Thr Asp Ser Phe
 85 90 95

Thr Gly Leu Val Asn Ile Leu Thr Asp Ile Ile Trp Arg Phe Thr Gly
 100 105 110

Asp Phe Thr Ala Pro Asp Leu Val Cys Arg Val Val Arg Tyr Leu Gln
 115 120 125

Val Val Leu Leu Tyr Ala Ser Thr Tyr Val Leu Val Ser Leu Ser Ile
 130 135 140

Asp Arg Tyr His Ala Ile Val Tyr Pro Met Lys Phe Leu Gln Gly Glu
 145 150 155 160

Lys Gln Ala Arg Val Leu Ile Val Ile Ala Trp Ser Leu Ser Phe Leu
 165 170 175

Phe Ser Ile Pro Thr Leu Ile Ile Phe Gly Lys Arg Thr Leu Ser Asn
 180 185 190

Gly Glu Val Gln Cys Trp Ala Leu Trp Pro Gly Asp Ser Tyr Trp Thr
 195 200 205

Pro Tyr Met Thr Ile Val Ala Phe Leu Val Tyr Phe Ile Pro Leu Thr
 210 215 220

Ile Ile Ser Ile Met Tyr Gly Ile Val Ile Arg Thr Ile Trp Ile Lys
 225 230 235 240

Ser Lys Thr Tyr Glu Thr Val Ile Ser Asn Cys Ser Asp Gly Lys Leu
 245 250 255

Cys Ser Ser Tyr Asn Arg Gly Leu Ile Ser Lys Ala Lys Ile Lys Ala
 260 265 270

Ile Lys Tyr Ser Ile Ile Ile Leu Ala Phe Ile Cys Cys Trp Ser
 275 280 285

Pro Tyr Phe Leu Phe Asp Ile Leu Asp Asn Phe Asn Leu Leu Pro Asp
 290 295 300

Thr Gln Glu Arg Phe Tyr Ala Ser Val Ile Ile Gln Asn Leu Pro Ala
 305 310 315 320

Leu Asn Ser Ala Ile Asn Pro Pro Ile Tyr Cys Val Phe Ser Ser Ser
 325 330 335

Ile Ser Phe Pro Cys Arg Glu Gln Arg Ser Gln Asp Ser Arg Met Thr
 340 345 350

Phe Arg Glu Arg Thr Glu Arg His Glu Met Gln Ile Leu Ser Lys Pro
 355 360 365

Glu Phe Ile
 370

<210> 26
 <211> 393

<212> PRT
<213> Homo sapiens

<400> 26

Met Glu Thr Thr Met Gly Phe Met Asp Asp Asn Ala Thr Asn Thr Ser
1 5 10 15

Thr Ser Phe Leu Ser Val Leu Asn Pro His Gly Ala His Ala Thr Ser
20 25 30

Phe Pro Phe Asn Phe Ser Tyr Ser Asp Tyr Asp Met Pro Leu Asp Glu
35 40 45

Asp Glu Asp Val Thr Asn Ser Arg Thr Phe Phe Ala Ala Lys Ile Val
50 55 60

Ile Gly Met Ala Leu Val Gly Ile Met Leu Val Cys Gly Ile Gly Asn
65 70 75 80

Phe Ile Phe Ile Ala Ala Leu Val Arg Tyr Lys Lys Leu Arg Asn Leu
85 90 95

Thr Asn Leu Leu Ile Ala Asn Leu Ala Ile Ser Asp Phe Leu Val Ala
100 105 110

Ile Val Cys Cys Pro Phe Glu Met Asp Tyr Tyr Val Val Arg Gln Leu
115 120 125

Ser Trp Glu His Gly His Val Leu Cys Thr Ser Val Asn Tyr Leu Arg
130 135 140

Thr Val Ser Leu Tyr Val Ser Thr Asn Ala Leu Leu Ala Ile Ala Ile
145 150 155 160

Asp Arg Tyr Leu Ala Ile Val His Pro Leu Arg Pro Arg Met Lys Cys
165 170 175

Gln Thr Ala Thr Gly Leu Ile Ala Leu Val Trp Thr Val Ser Ile Leu
180 185 190

Ile Ala Ile Pro Ser Ala Tyr Phe Thr Thr Glu Thr Val Leu Val Ile
195 200 205

Val Lys Ser Gln Glu Lys Ile Phe Cys Gly Gln Ile Trp Pro Val Asp
210 215 220

Gln Gln Leu Tyr Tyr Lys Ser Tyr Phe Leu Phe Ile Phe Gly Ile Glu
225 230 235 240

Phe Val Gly Pro Val Val Thr Met Thr Leu Cys Tyr Ala Arg Ile Ser
245 250 255

Arg Glu Leu Trp Phe Lys Ala Val Pro Gly Phe Gln Thr Glu Gln Ile
260 265 270

Arg Lys Arg Leu Arg Cys Arg Arg Lys Thr Val Leu Val Leu Met Cys
275 280 285

Ile Leu Thr Ala Tyr Val Leu Cys Trp Ala Pro Phe Tyr Gly Phe Thr
290 295 300

Ile Val Arg Asp Phe Phe Pro Thr Val Phe Val Lys Glu Lys His Tyr
305 310 315 320

Leu Thr Ala Phe Tyr Ile Val Glu Cys Ile Ala Met Ser Asn Ser Met
325 330 335

Ile Asn Thr Leu Cys Phe Val Thr Val Lys Asn Asp Thr Val Lys Tyr
340 345 350

Phe Lys Lys Ile Met Leu Leu His Trp Lys Ala Ser Tyr Asn Gly Gly
355 360 365

Lys Ser Ser Ala Asp Leu Asp Leu Lys Thr Ile Gly Met Pro Ala Thr
370 375 380

Glu Glu Val Asp Cys Ile Arg Leu Lys
385 390

<210> 27

<211> 389

<212> PRT

<213> Homo sapiens

<400> 27

Met Gly Phe Met Asp Asp Asn Ala Thr Asn Thr Ser Thr Ser Phe Leu
1 5 10 15

Ser Val Leu Asn Pro His Gly Ala His Ala Thr Ser Phe Pro Phe Asn
20 25 30

Phe Ser Tyr Ser Asp Tyr Asp Met Pro Leu Asp Glu Asp Glu Asp Val
35 40 45

Thr Asn Ser Arg Thr Phe Phe Ala Ala Lys Ile Val Ile Gly Met Ala
50 55 60

Leu Val Gly Ile Met Leu Val Cys Gly Ile Gly Asn Phe Ile Phe Ile
65 70 75 80

Ala Ala Leu Val Arg Tyr Lys Lys Leu Arg Asn Leu Thr Asn Leu Leu
85 90 95

Ile Ala Asn Leu Ala Ile Ser Asp Phe Leu Val Ala Ile Val Cys Cys
100 105 110

Pro Phe Glu Met Asp Tyr Tyr Val Val Arg Gln Leu Ser Trp Glu His
115 120 125

Gly His Val Leu Cys Thr Ser Val Asn Tyr Leu Arg Thr Val Ser Leu
130 135 140

Tyr Val Ser Thr Asn Ala Leu Leu Ala Ile Ala Ile Asp Arg Tyr Leu
145 150 155 160

Ala Ile Val His Pro Leu Arg Pro Arg Met Lys Cys Gln Thr Ala Thr
165 170 175

Gly Leu Ile Ala Leu Val Trp Thr Val Ser Ile Leu Ile Ala Ile Pro
180 185 190

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Ser Ala Tyr Phe Thr Thr Glu Thr Val Leu Val Ile Val Lys Ser Gln
 195 200 205
 Glu Lys Ile Phe Cys Gly Gln Ile Trp Pro Val Asp Gln Gln Leu Tyr
 210 215 220
 Tyr Lys Ser Tyr Phe Leu Phe Ile Phe Gly Ile Glu Phe Val Gly Pro
 225 230 235 240
 Val Val Thr Met Thr Leu Cys Tyr Ala Arg Ile Ser Arg Glu Leu Trp
 245 250 255
 Phe Lys Ala Val Pro Gly Phe Gln Thr Glu Gln Ile Arg Lys Arg Leu
 260 265 270
 Arg Cys Arg Arg Lys Thr Val Leu Val Leu Met Cys Ile Leu Thr Ala
 275 280 285
 Tyr Val Leu Cys Trp Ala Pro Phe Tyr Gly Phe Thr Ile Val Arg Asp
 290 295 300
 Phe Phe Pro Thr Val Phe Val Lys Glu Lys His Tyr Leu Thr Ala Phe
 305 310 315 320
 Tyr Ile Val Glu Cys Ile Ala Met Ser Asn Ser Met Ile Asn Thr Leu
 325 330 335
 Cys Phe Val Thr Val Lys Asn Asp Thr Val Lys Tyr Phe Lys Lys Ile
 340 345 350
 Met Leu Leu His Trp Lys Ala Ser Tyr Asn Gly Gly Lys Ser Ser Ala
 355 360 365
 Asp Leu Asp Leu Lys Thr Ile Gly Met Pro Ala Thr Glu Glu Val Asp
 370 375 380
 Cys Ile Arg Leu Lys
 385
 <210> 28
 <211> 9
 <212> PRT
 <213> Synthetic Substrate
 <400> 28
 Ala Pro Arg Thr Pro Gly Gly Arg Arg
 1 5
 <210> 29
 <211> 27
 <212> DNA
 <213> Artificial
 <220>
 <223> Novel Sequence
 <400> 29
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<210> 30	
<211> 32	
<212> DNA	
<213> Artificial	
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<223> Novel Sequence	
<400> 30	
ttcacactcgag ctacaccaga ctgcttctcg ac	32
<210> 31	
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<212> DNA	
<213> Artificial	
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<223> Novel Sequence	
<400> 31	
taggcacagg tcatcacag	19
<210> 32	
<211> 18	
<212> DNA	
<213> Artificial	
<220>	
<223> Novel Sequence	
<400> 32	
ttggacgcga ggaagggtg	18
<210> 33	
<211> 26	
<212> DNA	
<213> Artificial	
<220>	
<223> Novel Sequence	
<400> 33	
gcctggagcc tgtctttct gttctc	26
<210> 34	
<211> 28	
<212> DNA	
<213> Artificial	
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<223> Novel Sequence	
<400> 34	
gtagatgagg gggttgatgg cactattc	28

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<210> 35
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<220>
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<400> 35
cctgatcata tttgggaaga ggacactg 28

<210> 36
<211> 28
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 36
gatagccttg attttgcct ttgagatg 28

<210> 37
<211> 30
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 37
gcagcagaca atggccacca ggaagtgcaga 30

<210> 38
<211> 30
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 38
tgagcagggtt ggtgagggttgcgcagttct 30

<210> 39
<211> 22
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 39
tttcctggct cttgacaatg ac 22

<210> 40

<211> 19
<212> DNA
<213> Artificial

<220>
<223> Novel Sequence

<400> 40
tccacttgtg ttcttgccc 19

<210> 41
<211> 1612
<212> DNA
<213> Homo sapiens

<400> 41
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ccatcacatcg cgcggccaaag cccgtcatact acttctqccct qggcagtqcc caggggccga 960
ccatcacatcg cgcggccaaag cccgtcatact acttctqccct qggcagtqcc caggggccga 1020
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ctggggccag ccggacacctg aggaggcctt ggtgggtgac ccggtcatgt gctgtcaaag 1560
ttgtgaccct tggtctggag catgaggctc ccctgggagg cagctggaaa gg 1612

<210> 42
<211> 530
<212> PRT
<213> Homo sapiens

<400> 42

Val Ser Arg Asp Gly Ala Ile Ala Leu Pro Gly Ala Thr Glu Pro Asp
1 5 10 15

Ser Ile Ser Lys Lys Lys Arg Pro Phe Gly Ser Arg His His Gln Gln
20 25 30

Gly Ala Pro Trp Val Ser Asp Pro Leu Pro Thr Ser Pro Gly Pro Cys
35 40 45

Pro His Leu Ala Tyr Arg Asp Gln Pro His Gly Arg Leu Leu Arg Pro
50 55 60

Gly Asn His Gly Glu Gly Arg Asn Gly Asp Thr Phe Leu Leu Ser Val
65 70 75 80

Leu Gly Lys Arg Ser Leu Gly Gln Val Ala Glu Gly Asn Glu Arg
85 90 95

Gly Val Ser Ser Trp Arg Val Ser Pro Phe Pro Trp Ser Pro Thr Gln
100 105 110

Leu Ser Ser Pro Leu Met Trp Gly Gly Ala Gly Gly Met Asp Ser Ala
115 120 125

Pro Asp Ser Thr Val Val Val Tyr Arg Gly Ile Arg Arg Glu Ser Glu
130 135 140

Gln Asn Thr Leu Leu Gln His Pro Leu Ala Pro Arg Pro Met Met Glu
145 150 155 160

Pro Arg Glu Ala Gly Gln His Val Gly Ala Ala Asn Gly Ala Gln Glu
165 170 175

Asp Val Ala Phe Asn Leu Ile Ile Leu Ser Leu Thr Glu Gly Leu Gly
180 185 190

Leu Gly Gly Leu Leu Gly Asn Gly Ala Val Leu Trp Leu Leu Ser Ser
195 200 205

Asn Val Tyr Arg Asn Pro Phe Ala Ile Tyr Leu Leu Asp Val Ala Cys
210 215 220

Ala Asp Leu Ile Phe Leu Gly Cys His Met Val Ala Ile Val Pro Asp

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225

230

235

240

Leu Leu Gln Gly Arg Leu Asp Phe Pro Gly Phe Val Gln Thr Ser Leu
 245 250 255

Ala Thr Leu Arg Phe Cys Tyr Ile Val Gly Leu Ser Leu Leu Ala Ala
 260 265 270

Val Ser Val Glu Gln Cys Leu Ala Ala Leu Phe Pro Ala Trp Tyr Ser
 275 280 285

Cys Arg Arg Pro Arg His Leu Thr Thr Cys Val Cys Ala Leu Thr Trp
 290 295 300

Ala Leu Cys Leu Leu Leu His Leu Leu Leu Ser Gly Ala Cys Thr Gln
 305 310 315 320

Phe Phe Gly Glu Pro Ser Arg His Leu Cys Arg Thr Leu Trp Leu Val
 325 330 335

Ala Ala Val Leu Leu Ala Leu Leu Cys Cys Thr Met Cys Gly Ala Ser
 340 345 350

Leu Met Leu Leu Leu Arg Val Glu Arg Gly Pro Gln Arg Pro Pro Pro
 355 360 365

Arg Gly Phe Pro Gly Leu Ile Leu Leu Thr Val Leu Leu Phe Leu Phe
 370 375 380

Cys Gly Leu Pro Phe Gly Ile Tyr Trp Leu Ser Arg Asn Leu Leu Trp
 385 390 395 400

Tyr Ile Pro His Tyr Phe Tyr His Phe Ser Phe Leu Met Ala Ala Val
 405 410 415

His Cys Ala Ala Lys Pro Val Val Tyr Phe Cys Leu Gly Ser Ala Gln
 420 425 430

Gly Arg Arg Leu Pro Leu Arg Leu Val Leu Gln Arg Ala Leu Gly Asp
 435 440 445

Glu Ala Glu Leu Gly Ala Val Arg Glu Thr Ser Arg Arg Gly Leu Val
 450 455 460

Asp Ile Ala Ala Ala Leu Gly Pro Pro Thr Pro Ala Ala Ala Pro Val
 465 470 475 480

Arg Gln Glu Gly Asp Val Gly Lys Val Val Gly Ser Glu Ala Gly Ala
 485 490 495

Ser Arg Thr Trp Arg Arg Pro Trp Trp Val Thr Arg Ser Cys Ala Val
 500 505 510

Lys Val Val Thr Leu Gly Leu Glu His Glu Ala Pro Leu Gly Gly Ser
 515 520 525

Trp Lys
 530

<210> 43
 <211> 1612

<212> DNA
 <213> Homo sapiens

 <400> 43
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 ccaaaaaaaaaa aaggccattc tgaggatcaa ggcaccacta gcaacaggga gccccatggg 120
 tctcagaccc tctcccccaca tctcctggtc cctgccccca cctggcgta c agggaccagc 180
 cccacggaag gctcttgagg ccaggtaacc atggggaggg gaggaatggg gacaccttcc 240
 tcctgagtgt cttaggaaag agaagcttag gtcaggtggc tgagggtgga aatgagagag 300
 gggctcctc ctggagggtc tcaccattcc cttggtcacc cacccaaactc tcatactcccc 360
 tgatgtgggg aggagcaggg ggcattggatt cctgagcccc agactcaact gttgtggtt 420
 acaggggcat caggagagag agcgagcaga acacactcct gcagcatccc ctggcccccc 480
 gccccatgat ggagccaga gaagctggac agcacgtggg ggccgccaac ggcccggcagg 540
 aggatgtggc cttcaacctc atcatcctgt ccctcaccga ggggctcggc ctcggtgggc 600
 tgctggggaa tggggcagtc ctctggctgc tcagctccaa tgtctacaga aaccccttcg 660
 ccatctacct cctggacgtg gcctgcgcgg atctcatctt cttggctgc cacatggtgg 720
 ccatcgtccc cgacttgctg caaggccggc tggacttccc gggcttcgtg cagaccagcc 780
 tggcaacgct gcgcttcttc tgctacatcg tggcctgag ttcctggcg gccgtcagcg 840
 tggagcagtg cctggccgcc ctcttccag cctggtaactc gtggccggc ccacgcccacc 900
 tgaccacctg tgtgtgcgcc ctcacctggg ccctctgcct gctgctgcac ctgctgctca 960
 gcggcgcctg caccagttc ttggggagc ccagccgcca cttgtggcg acgctgtggc 1020
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 cccggAACCT gctctggta c atccccact acttctacca cttcagcttc ctcataggcc 1260
 ccgtgcactg cgccggcaag cccgtcgta c acttctgcct gggcagtgcc cagggccgca 1320
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 ttgtgaccct tggctggag catgaggctc ccctgggagg cagctggaaa gg 1612

<210> 44
 <211> 311

<212> PRT
<213> Homo sapiens

<400> 44

Met Met Glu Pro Arg Glu Ala Gly Gln His Val Gly Ala Ala Asn Gly
1 5 10 15

Ala Gln Glu Asp Val Ala Phe Asn Leu Ile Ile Leu Ser Leu Thr Glu
20 25 30

Gly Leu Gly Leu Gly Leu Leu Gly Asn Gly Ala Val Leu Trp Leu
35 40 45

Leu Ser Ser Asn Val Tyr Arg Asn Pro Phe Ala Ile Tyr Leu Leu Asp
50 55 60

Val Ala Cys Ala Asp Leu Ile Phe Leu Gly Cys His Met Val Ala Ile
65 70 75 80

Val Pro Asp Leu Leu Gln Gly Arg Leu Asp Phe Pro Gly Phe Val Gln
85 90 95

Thr Ser Leu Ala Thr Leu Arg Phe Cys Tyr Ile Val Gly Leu Ser Leu
100 105 110

Leu Ala Ala Val Ser Val Glu Gln Cys Leu Ala Ala Leu Phe Pro Ala
115 120 125

Trp Tyr Ser Cys Arg Arg Pro Arg His Leu Thr Thr Cys Val Cys Ala
130 135 140

Leu Thr Trp Ala Leu Cys Leu Leu Leu His Leu Leu Leu Ser Gly Ala
145 150 155 160

Cys Thr Gln Phe Phe Gly Glu Pro Ser Arg His Leu Cys Arg Thr Leu
165 170 175

Trp Leu Val Ala Ala Val Leu Leu Ala Leu Leu Cys Cys Thr Met Cys
180 185 190

Gly Ala Ser Leu Met Leu Leu Leu Arg Val Glu Arg Gly Pro Gln Arg
195 200 205

Pro Pro Pro Arg Gly Phe Pro Gly Leu Ile Leu Leu Thr Val Leu Leu
210 215 220

Phe Leu Phe Cys Gly Leu Pro Phe Gly Ile Tyr Trp Leu Ser Arg Asn
225 230 235 240

Leu Leu Trp Tyr Ile Pro His Tyr Phe Tyr His Phe Ser Phe Leu Met
245 250 255

Ala Ala Val His Cys Ala Ala Lys Pro Val Val Tyr Phe Cys Leu Gly
260 265 270

Ser Ala Gln Gly Arg Arg Leu Pro Leu Arg Leu Val Leu Gln Arg Ala
275 280 285

Leu Gly Asp Glu Ala Glu Leu Gly Ala Val Arg Glu Thr Ser Arg Arg
290 295 300

Gly Leu Val Asp Ile Ala Ala
305 310

<210> 45
<211> 939
<212> DNA
<213> Homo sapiens

<400> 45
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Leu Ser Ser Asn Val Tyr Arg Asn Pro Phe Ala Ile Tyr Leu Leu Asp
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Val Pro Asp Leu Leu Gln Gly Arg Leu Asp Phe Pro Gly Phe Val Gln
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Thr Ser Leu Ala Thr Leu Arg Phe Cys Tyr Ile Val Gly Leu Ser Leu
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Cys Thr Gln Phe Phe Gly Glu Pro Ser Arg His Leu Cys Arg Thr Leu
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Phe Leu Phe Cys Gly Leu Pro Phe Gly Ile Tyr Trp Leu Ser Arg Asn
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Leu Leu Trp Tyr Ile Pro His Tyr Phe Tyr His Phe Ser Phe Leu Met
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